=> file casreact
FILE 'CASREACT' ENTERED AT 15:48:34 ON 18 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

FILE CONTENT:1840 - 16 May 2004 VOL 140 ISS 20

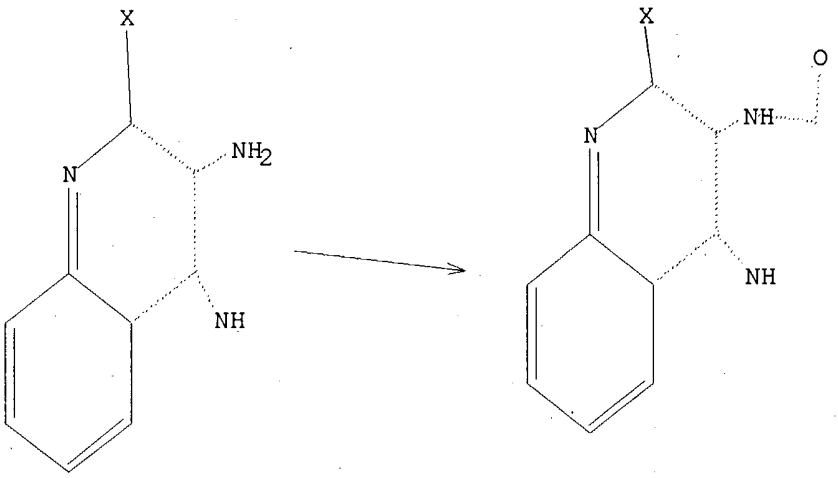
Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem and some records are produced using some INPI data from the period prior to 1986.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> d que
L1 STR



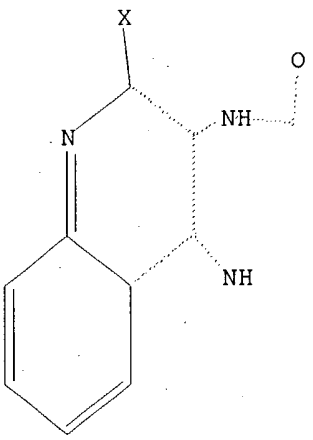
Structure attributes must be viewed using STN Express query preparation.
L3 0 SEA FILE=CASREACT SSS FUL L1 (0 REACTIONS)

=> file caplus
FILE 'CAPLUS' ENTERED AT 15:49:40 ON 18 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 18 May 2004 VOL 140 ISS 21
FILE LAST UPDATED: 17 May 2004 (20040517/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que
L4 STR



Structure attributes must be viewed using STN Express query preparation.
L6 7 SEA FILE=REGISTRY SSS FUL L4
L7 3 SEA FILE=CAPLUS L6

=> d l7 1-3 ibib abs hitt
'HITT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
ENTER DISPLAY FORMAT (BIB):

ENTER DISPLAY FORMAT (BIB):

ENTER DISPLAY FORMAT (BIB):

ENTER DISPLAY FORMAT (BIB):

ENTER DISPLAY FORMAT (BIB):

YOU HAVE RECEIVED THIS PROMPT MESSAGE 5 CONSECUTIVE TIMES WITHOUT ENTERING A REQUESTED RESPONSE

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers

ENTER DISPLAY FORMAT (BIB):end

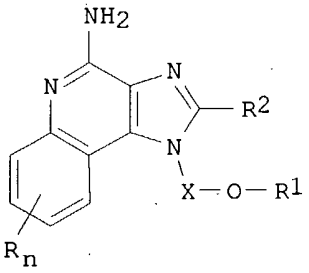
=> d l7 1-3 ibib abs hit

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:449681 CAPLUS
DOCUMENT NUMBER: 137:33297
TITLE: Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers
INVENTOR(S): Crooks, Stephen L.; Greisgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046190	A2	20020613	WO 2001-US46582	20011206
WO 2002046190	A3	20030717		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002039517	A5	20020618	AU 2002-39517	20011206
US 2003065005	A1	20030403	US 2001-11921	20011206
US 6664260	B2	20031216		
EP 1341790	A2	20030910	EP 2001-987283	20011206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300274	A	20031015	EE 2003-274	20011206
NO 2003002473	A	20030530	NO 2003-2473	20030530
US 2004072858	A1	20040415	US 2003-675833	20030930

PRIORITY APPLN. INFO.: US 2000-254218P P 20001208
US 2001-11921 A1 20011206
WO 2001-US46582 W 20011206

OTHER SOURCE(S): MARPAT 137:33297
GI



I

AB The title compds. [I; X = (CH2)2, (CH2)3, CHEtCH2, etc.; R1 = R4NR3SO2R6alkyl, R4NR3SO2R6aryl, etc.; R2 = H, alkyl, alkenyl, etc.; R3 = H, alkyl, aralkyl; R4 = alkylene or alkenylene interrupted by one or more O atoms; or R3R4 can join together to form a ring; R6 = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepd. E.g., a multi-step synthesis of I [X = (CH2)2; R1 = (CH2)2NMeSO2Me; R2 = (CH2)2OMe; n = 0] which showed the lowest concn. of 0.01 .mu.M and 0.12 .mu.M to induce interferon .alpha. and TNF.alpha., resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 89151-44-0P 89151-46-2P 127828-22-2P 139115-91-6P 176220-30-7P
302331-20-0P 436855-72-0P 436855-76-4P 436855-79-7P 436855-83-3P
436855-86-6P 436855-89-9P 436855-93-5P 436856-76-7P 436856-78-9P
436856-80-3P 436856-82-5P 436856-84-7P 436856-86-9P 436856-88-1P
436856-90-5P 436856-92-7P 436856-93-8P 436856-95-0P 436856-98-3P
436857-00-0P 436857-02-2P 436857-04-4P 436857-06-6P 436857-08-8P
436857-10-2P 436857-12-4P 436857-16-8P 436857-18-0P 437383-00-1P
437383-01-2P 437383-02-3P **437383-03-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonamido ether substituted imidazoquinolines as immune response modifiers)

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:694176 CAPLUS
DOCUMENT NUMBER: 132:73001
TITLE: Evaluation of trifluoroacetic acid as an ion-pair reagent in the separation of small ionizable molecules by reversed-phase liquid chromatography
AUTHOR(S): Cai, B.; Li, J.
CORPORATE SOURCE: Analytical Research & Development, 3M Center, 3M Pharmaceuticals, St. Paul, MN, USA
SOURCE: Analytica Chimica Acta (1999), 399(3), 249-258
CODEN: ACACAM; ISSN: 0003-2670
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This paper describes the results of a study on trifluoroacetic acid (TFA) as an effective ion-pair reagent in the sepn. of small ionizable compds. by reversed-phase liq. chromatog. (RPLC). Retention times were obtained when the amt. of TFA in the mobile phase was gradually increased in the sepn. of basic compds. by gradient elution. For the purpose of comparison, phosphoric acid was also used in the mobile phase. TFA can be used as not only a mobile phase pH stabilizer but also sometimes as an effective ion-pair reagent to control both retention and selectivity in the sepn. of small ionizable solutes. The no. of charges (or pKa values) on the solutes is not the only factor responsible for the effect of TFA. The other factor comprises the mutual accessibility of TFA and the pos. charged functional groups and subsequent noncoulombic interaction. Both factors equally control the ion-pair effect. The results of the study should be applicable to other fluorinated acids, such as heptafluorobutyric acid, for the control of retention and selectivity in RPLC.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 133860-78-3 144875-23-0 144875-24-1 144875-48-9 144875-99-0

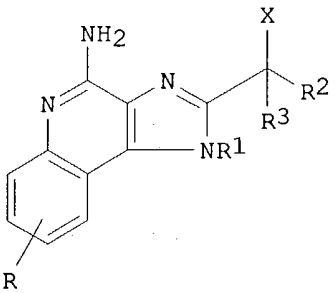
144876-01-7 165120-44-5 253120-61-5 253120-62-6 253120-63-7
253120-64-8 **253120-65-9**
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(evaluation of trifluoroacetic acid as ion-pair reagent in sepn. of small ionizable mols. by reversed-phase liq. chromatog.)

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:420800 CAPLUS
DOCUMENT NUMBER: 123:83363
TITLE: 1-Substituted, 2-substituted 1H-imidazo[4,5-c]quinolin-4-amines as antiviral and antitumor agents and inducers of biosynthesis of interferon
INVENTOR(S): Gerster, John F.; Crooks, Stephen L.; Lindstrom, Kyle J.
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
SOURCE: U.S., 26 pp. Cont.-in-part of U.S. Ser. No. 838,475, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5389640	A	19950214	US 1992-938295	19920828
CA 2104782	AA	19920902	CA 1992-2104782	19920220
CA 2104782	C	20010807		
EP 872478	A2	19981021	EP 1998-105754	19920220
EP 872478	A3	19981104		
EP 872478	B1	20021218		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
CA 2289219	C	20030520	CA 1992-2289219	19920220
ZA 9201540	A	19921125	ZA 1992-1540	19920228
IL 114570	A1	19961031	IL 1992-114570	19920301
US 5605899	A	19970225	US 1994-353802	19941212
US 5741909	A	19980421	US 1997-789264	19970128
US 5977366	A	19991102	US 1998-60010	19980414
US 6348462	B1	20020219	US 1999-386486	19990827
US 2002115861	A1	20020822	US 2001-974038	20011009
US 6465654	B2	20021015		
US 2003119861	A1	20030626	US 2002-238661	20020910
US 6608201	B2	20030819		
US 2003212270	A1	20031113	US 2003-436905	20030513
US 6686472	B2	20040203		

PRIORITY APPLN. INFO.:
US 1991-662926 B2 19910301
US 1991-687326 B2 19910418
US 1992-838475 B2 19920219
CA 1992-2104782 A3 19920220
EP 1992-906763 A3 19920220
IL 1992-101110 A3 19920301
US 1992-938295 A3 19920828
US 1994-353802 A3 19941212
US 1997-789264 A3 19970128
US 1998-60010 A3 19980414
US 1999-386486 A1 19990827
US 2001-974038 A3 20011009
US 2002-238661 A3 20020910

OTHER SOURCE(S): MARPAT 123:83363
GI



I

AB 1-Substituted, 2-substituted 1H-imidazo[4,5-c]-quinolin-4-amines I [wherein R1 is selected from the group consisting of: hydroxyalkyl of one to about six carbon atoms and alkoxyalkyl wherein the alkoxy moiety is of one to about four carbon atoms and the alkyl moiety is of one to about six carbon atoms; R2 and R3 are independently selected from the group consisting of hydrogen and alkyl of one to about four carbon atoms; X is selected from the group consisting of alkoxy of one to about four carbon atoms, alkoxyalkyl wherein the alkoxy moiety is of one to about four carbon atoms and the alkyl moiety is of one to about four carbon atoms, hydroxyalkyl of one to about four carbon atoms, and hydroxy; and R is selected from the group consisting of hydrogen, straight chain or branched chain alkoxy of one to about four carbon atoms, halogen, and straight chain or branched chain alkyl of one to about four carbon atoms; or a pharmaceutically acceptable acid addn. salt thereof] are disclosed. These compds. function as antiviral agents, they induce biosynthesis of interferon, and they inhibit tumor formation in animal models. This invention also provides intermediates for prepg. such compds., pharmaceutical compns. contg. such compds., and pharmacol. methods of using such compds. I inhibited Herpes simplex virus type II lesions in guinea pigs and were also active against vesicular stomatitis virus in vitro. Interferon-.alpha. induction in human cells by I: at dose concn. of, e.g., 0.50 .mu.g/mL, .alpha. ref. units/mL of up to 2500 were obsd. Inhibition of MC-26 tumors in mice by I: at dose of 30 mg/kg, no. of colonies as low as 123 .+-. 31 vs. 385 .+-. 31 for control were obsd.

IT 99009-96-8P, N-Butyl-3-nitro-4-quinolinamine 99010-09-0P 99010-24-9P, 1-(2-Methylpropyl)-1H-imidazo[4,5-c]quinoline 132521-66-5P 144660-63-9P 144660-64-0P 144660-65-1P 144660-68-4P 144660-69-5P 144875-50-3P, 1-(2-Methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methanol 144875-51-4P, 1-(2-Methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 144875-52-5P, 1-(2-Methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Benzoate 144875-53-6P, 2-Acetoxymethyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-54-7P, 2-Benzoyloxymethyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-55-8P, 4-Chloro-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 144875-56-9P, 4-Chloro-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Benzoate 144875-57-0P, 4-Chloro-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methanol 144875-58-1P 144875-59-2P 144875-60-5P 144875-61-6P 144875-62-7P 144875-63-8P 144875-64-9P, 1-Phenylmethyl-1H-imidazo[4,5-c]quinoline-2-methanol 144875-65-0P, 1-Phenylmethyl-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 144875-66-1P, 1-Phenylmethyl-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 5N Oxide 144875-67-2P, 2-Methoxymethyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 144875-68-3P, 4-(3-Methoxypropylamino)-3-nitroquinoline 144875-69-4P, 2-Ethoxymethyl-1-(3-methoxypropyl)-1H-imidazo[4,5-c]quinoline 144875-70-7P, 2-Ethoxymethyl-1-(3-methoxypropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-71-8P 144875-72-9P 144875-73-0P 144875-74-1P 144875-75-2P, 2-(1-Acetoxypentyl)-1-(2-

methylpropyl)-1H-imidazo[4,5-c]quinoline 144875-76-3P, 2-(1-Acetoxypentyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-77-4P, 2-(1-Methoxyethyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 144875-78-5P, 2-(1-Methoxyethyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-79-6P 144875-80-9P, 2-(1-Acetoxyethyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-81-0P, 2-(2-Methoxyethyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 144875-82-1P, 2-(2-Methoxyethyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-83-2P, 1-[1-(2-Methylpropyl)-1H-imidazo[4,5-c]quinolin-2-yl]propan-2-one 144875-84-3P, 2-(2-Methoxypropyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-86-5P, 2-(2-Acetoxypropyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-88-7P, 7-Chloro-4-(2-hydroxy-2-methylpropylamino)-3-nitroquinoline 144875-89-8P 144875-90-1P, 7-Chloro-2-ethoxymethyl-1-(2-hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-91-2P 144875-92-3P, 1-(2-Hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 144875-93-4P, 2-Acetoxymethyl-1-(2-hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-94-5P, 4-Chloro-1-(2-hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 144875-95-6P, 2-Ethoxymethyl-1-phenylmethyl-1H-imidazo[4,5-c]quinoline 144875-96-7P, 2-Ethoxymethyl-1-phenylmethyl-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-97-8P 144875-98-9P, 1-(2-Hydroxy-2-methylpropyl)-2-methoxymethyl-1H-imidazo[4,5-c]quinoline 5N Oxide 144875-99-0P 144876-00-6P, 2-Ethoxymethyl-1-(2-Hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144876-01-7P 144876-02-8P, 2-Methoxymethyl-1-phenylmethyl-1H-imidazo[4,5-c]quinoline 144876-03-9P, 2-Methoxymethyl-1-phenylmethyl-1H-imidazo[4,5-c]quinoline 5N Oxide 144876-05-1P, 2-(1-Acetoxypentyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinolin-4-amine 144876-07-3P, 2-(2-Methoxypropyl)-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 144876-08-4P 144876-09-5P, 2-Methoxymethyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 144876-10-8P, 1-(2-Methoxyethyl)-2-methoxymethyl-1H-imidazo[4,5-c]quinoline 144876-11-9P, 1-(2-Methoxyethyl)-2-methoxymethyl-1H-imidazo[4,5-c]quinoline 5N Oxide 144876-12-0P, 2-Ethoxymethyl-1-(2-methylpropyl)-1H-imidazo-4,5-c]quinoline 144876-13-1P, 2-Ethoxymethyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinoline 5N Oxide 165120-29-6P, 2-Chloromethyl-1-phenylmethyl-1H-imidazo[4,5-c]quinolin-4-amine Hydrochloride 165120-31-0P 165120-32-1P 165120-33-2P, 4-(3-Methylbutylamino)-3-nitroquinoline 165120-34-3P, 3-Amino-4-(3-methylbutylamino)quinoline 165120-35-4P, 2-Ethoxymethyl-1-(3-methylbutyl)-1H-imidazo[4,5-c]quinoline 165120-36-5P, 2-Ethoxymethyl-1-(3-methylbutyl)-1H-imidaz[4,5-c]quinoline 5N Oxide **165120-38-7P**, N-[2-Chloro-4-(2-hydroxy-2-methylpropyl)amino-3-quinolinyl]-3-methoxypropanamide 165120-39-8P, 4-Butylamino-2-chloro-3-nitroquinoline 165120-40-1P, 3-Amino-4-butylamino-2-chloroquinoline **165120-41-2P**, N-(4-Butylamino-2-chloro-3-quinolinyl)-3-methoxypropanamide **165120-43-4P**, N-(4-Butylamino-2-chloro-3-quinolinyl)ethoxyacetamide 165120-45-6P, 4-[(2-Chloro-3-nitro-4-quinolinyl)amino]-3-methyl-1-butene-3-ol 165120-46-7P **165120-47-8P**, N-[2-Chloro-4-(2-hydroxy-2-methylbutyl)amino-3-quinolinyl]ethoxyacetamide 165120-49-0P, 1-Butyl-1H-imidazo[4,5-c]quinoline-2-methanol 165120-50-3P, 1-Butyl-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 165120-51-4P, 1-Butyl-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 5N Oxide 165120-52-5P, 1-Butyl-4-chloro-1H-imidazo[4,5-c]quinoline-2-methyl Acetate 165120-53-6P, 1-Butyl-4-chloro-1H-imidazo[4,5-c]quinoline-2-methanol 165120-56-9P 165120-57-0P 165120-58-1P 165120-59-2P 165120-60-5P 165120-62-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(1H-imidazo[4,5-c]quinolin-4-amines as antiviral and antitumor agents

and inducers of biosynthesis of interferon)